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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-----------------|-------------------------|---------------------|------------------|
| 09/871,468 | 05/31/2001 | Ichiro Fukunishi | 55973/70904 | 1525 |
| 21874 | 7590 04/03/2003 | | | |
| EDWARDS | S & ANGELL, LLP | EXAMINER | | |
| P.O. BOX 91 BOSTON, M | | | NGUYEN, HOAN C | |
| | | | ART UNIT | PAPER NUMBER |
| | 2871 | | | |
| | | DATE MAILED: 04/03/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.





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| 09/871,468 | 05/31/2001 | Ichiro Fukunishi | 55973/70904 | 55973/70904 1525 | |
| 7 | 590 11/15/2002 | | | | |
| | in, Roberts & Cushma | EXAMINER | | | |
| 130 Water Street Boston, MA 02109 | | | NGUYEN, HOAN C | | |
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|---|---|--|--|--|--|--|--|
| | Application No. | icant(s) | | | | | |
| Office Action Summan. | 09/871,468 | FUKUNISHI, ICHIRO | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | HOAN C. NGUYEN | 2871 | | | | | |
| Th MAILING DATE of this communication app P riod for R ply | ears on the cover sheet with the c | orrespondenc address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | | |
| 2a) This action is FINAL . 2b)⊠ Thi | s action is non-final. | | | | | | |
| 3) Since this application is in condition for allowa | | | | | | | |
| closed in accordance with the practice under <i>I</i> Disposition of Claims | Ex parte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | | | | |
| 4) Claim(s) 7-10 and 17-20 is/are pending in the | application. | | | | | | |
| 4a) Of the above claim(s) 1-6,11-16 and 21-30 is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>7-10 and 17-20</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accep | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| | | ved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| | priority under 35 H S C & 119/a |)-(d) or (f) | | | | | |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | | |
| 1.⊠ Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | |
| Attachment(s) | . , , , , , , , , , , , , , , , , , , , | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | | |
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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species C (claims 7-10 and 17-20, Fig. 4) in Paper No. 6 is acknowledged. Claims 1-6, 11-16 and 21-30 are withdrawn from consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 7-10 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 17 are rejected since the limitation "the two electrodes" in claims 7 and 17 is lack antecedent basis.

Claims 8-10 and 18-20 are rejected since they depend on infinite claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.



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1. Claims 7-10 and 17-20 are rejected under 35 U.S.C. 102(b) as being antipated

by Matsueda (US5173792A).

In regard to claims 7 and 17, Matsueda teaches (Fig. 11) a liquid crystal display

device comprising:

gate wiring Y_n and source wiring X_n disposed in a lattice state;

a switching element 140A/B provided on each lattice point;

• a pixel electrode 141 to be connected to a drain electrode 144/174 of the

switching element;

an auxiliary capacitance electrode160 which is formed in the same

manufacturing process as the gate wiring Y_{n-1} and disposed in parallel with the

gate wiring so as to form a storage capacitance which is serially connected to the

pixel electrode;

electrodes 170A-C which are disposed in parallel on said auxiliary capacitance

electrode at different portions at an extension portion of the drain electrode of the

switching element in an extending direction via pixel electrode and connected to

each other via a coupling portion to connect with the drain electrode through pixel

electrode, and a branch coupling portion which branches off from the coupling

portion in-between;

wherein

• the electrodes are connected to the pixel electrodes via through holes 165 which

are respectively formed in a layer insulating film 148 and stacked via the auxiliary



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capacitance electrode and insulating film so as to respectively form the storage capacitances;

and, according to claim 17,

 a method, when a short circuit/or defect occurs between either one of the two electrodes and the auxiliary capacitance electrode, comprising the steps of:

 laser-cutting the coupling portion or branch coupling portion that is connected to the electrode on a short-circuited side off; and electrically disconnecting the electrode on the short-circuited side from the pixel electrode (col. 15 lines 62-68).

Regard to claims 8 and 18, Matsueda teaches (Fig. 11) a liquid crystal display device, wherein the coupling portion and the branch coupling portion are respectively made of thin lines.

Regards to claims 9 and 19, Matsueda teaches (Fig. 11) a liquid crystal display device wherein the two electrodes are pad electrodes 170A-C, respectively.

Regards to claims 10 and 20, Matsueda teaches (Fig. 11) a liquid crystal display device, wherein the switching element is a thin film transistor.





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Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ukai et al. (US5042916) disclose active matrix display device having divided additional capacilors.

Takizawa et al. (US5483082A) disclose a matrix device with storage capacitor having two electrodes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (703) 306-0472. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

HOAN C. NGUYEN Examiner

Examiner
Art Unit 2871

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November 10, 2002

TOANTON TOANTON PRIMARY EXAMINER